

Hab, Darling River near Wilcannia (*E. G. Vickery*). Nepean River (*Lesson*).

This is about one of the commonest Fresh Water bivalves we have, it is found in nearly every river and small stream in New South Wales. One specimen and two valves were obtained by Mr. Vickery.

NOTES ON THE ZOOLOGY OF LORD HOWE'S ISLAND.

By E. P. RAMSAY, F.L.S., CURATOR OF THE AUSTRALIAN MUSEUM.

The Zoology of Lord Howe's Island has always been looked upon with considerable interest by Naturalists. The fauna blending as it were, types of two distinct Zoological Provinces, the Australian and New Zealand Regions. The attention of some of our early Naturalists was drawn to this Island by finding there, the now extinct "White Gallinule," then called (*Fulica alba*), but which proves to be a species of *Notornis*. This bird appears to have been first mentioned by Callam in 1783 and afterwards in "Philipp's Voyage to Botany Bay," 1789, p. 160, and again under the name of *Gullinula alba*, by White, in his "Voyage to New South Wales," 1790, p. 238. Further notices of this bird will be found in Herr von Pelzeln's Paper, in the "Ibis" 1871, p. 44; where its relation to the genus *Notornis* was first pointed out, a good figure of it also will be found, in the "Ibis," 1873, pl. x.

During the last three years I have made every exertion through the settlers on the island, to ascertain if this bird still exists there, but without effect. On one occasion "Red bills" were reported to me by Capt. Armstrong as having been seen on the hill side, but on my correspondent sending there nothing was heard or seen of them. The only other large land bird known,

and which still exists on the Island is the "Wood Hen"—*Ocydromus sylvestris* and of which I have recently seen specimens, but this species also is fast becoming extinct, being easily captured or killed. One pigeon only is now found—*Chalcophaps chrysochloris*. Although numerous large birds of this family were formerly said to exist there.

There seem to be no indigenous four footed Mammals. I have heard of a *Mus*, but as yet none have come to hand; and two small Bats of the genus *Scotophilus* are all I have seen of the order Chiroptera.

Among some Geological specimens received from Mr. Berry, who has, I believe, recently returned from the Island; I found a portion of the pelvis of a Turtle, the fossil was much water-worn and encrusted with carbonate of lime, upon my making this known, further search was made by other parties and I believe other bones found, which I regret I did not see before they left the colony. I believe the bone above referred to will prove to belong to a large sea turtle, but from the only fragment I have seen it would be very risky to draw any definite conclusions respecting its genus. One Gecko, *Gehyra oceanica*, is all I have seen of the Reptilia.

I append a list of the Birds of the Island from which it will be seen how closely its avifauna approaches that of New South Wales on the one hand, and in two important particulars, that of the New Zealand Region on the other. The genera found in the New Zealand Region and not in the Australian, are *Notornis*, *Ocydromus*, *Aplonis*, *Merula*; all the other genera are represented in New South Wales by the same or allied species; there being of the whole avifauna only 9 species as far as is at present known, peculiar to the Island, the names of these are printed in larger type.

No. of Species.	List of Birds found on Lord Howe's Isld.				NEW ZEALAND.		N. S. WALES.	
					Genus.	Species.	Genus.	Species.
				Species peculiar.				
1.	MERULA	VINITINCTA,	Gould *				
2.	APLONIS	FUSCUS,	Gould *				
3.	MYIAGRA	PLUMBEA,	Vig. & Horsf	.. ..			*	*
4.	RHIPIDURA	CERVINA,	Ramsay. *	*		*	
5.	GERYGONE	INSULARIS,	Ramsay.. *	*		*	
6.	PACHYCEPHALA	RUFIVENTRIS,	Lath.	.. ..			*	*
7.	PACHYCEPHALA	GUTTURALIS,	Lath.	.. ..			*	*
8.	ZOSTEROPS	STRENUUS,	Gould. *	*		*	
9.	ZOSTEROPS	TEPHROPLEURUS,	Gould. *			*	
10.	CUCULUS	FLABELLIFORMIS,	Lath	.. ..	*		*	*
11.	CHALCITES	LUCIDUS,	Gml.	.. ..	*	*	*	*
12.	EURYSTOMUS	PACIFICUS	.. ..	.. ..	*	*	*	*
13.	STREPERA	CRISSALIS,	Sharpe. *			*	
14.	HALEYON	VAGANS,	Less...	.. ..	*	*	*
15.	NINOX	BOOBOO,	Lath...	.. ..	*		*	*
*16.	HALIASTER	SPHENURUS,	Vieill..	.. ..			*	*
*17.	HALIAETUS	LEUCOGASTER,	Lath.	.. ..			*	*
18.	CHALCOPHAPS	CHRYSOCHLORA..	.. ..	.. ..			*	*
19.	HYPOTÆNIDIA	AUSTRALIS,	Pelzln†	.. ..	*	*	*	*
20.	OCYDROMUS	SYLVESTRIS,	Sclater.. *	*			
*21.	PORPHYRIO,	MELANOTUS..	.. ..	.. ..	*	*	*	*
22.	NOTORNIS	ALBA,	White.	.. ..	*	*	
23.	NYCTICORAX	CALEDONICUS,	Lath.	.. ..	*	*	*	*
24.	ARDETTA	MINUTA,	Linn..	.. ..	*	*	*	*
*25.	ANAS	SUPERCILIOSA,	Gmel.	.. ..	*	*	*	*
26.	CINCLUS	INTERPRES,	Linn.	.. ..	*	*	*	*
27.	ÆGIALITIS	(BICINCTUS?)	juv..	.. ..	*	*	*	*
28.	CHARADRIUS	XANTHOCHEILUS,	Gould.	.. ..	*	*	*	*
29.	LIMOSA	UROPYGIALIS,	Gould..	.. ..	*	*	*	*

† This is *Rallus pectoralis*, of Gould's Bds. Aust,

No. of Species.	List of Birds found on Lord Howe's Isld.	Species peculiar.	NEW ZEALAND.		N. S. WALES.	
			Genus.	Species.	Genus.	Species.
30.	<i>Anous cinereus</i> , <i>Gould</i>				*	*
31.	<i>Anous stolidus</i> , <i>Lath</i>				*	*
32.	<i>Onychoprion fuliginosa</i> , <i>Gmel</i>				*	*
33.	<i>Phæton phœnicurus</i> , <i>Gml</i>				*	*
34.	<i>Procellaria</i> sp		*		*	*

On consulting the table it will be seen that, as I remarked before, 9 species only are peculiar to the Island; and when we know more about the adjacent islands, Norfolk and Philipp Islands, it will probably be found that some of these inhabit also those Islands. Of the New Zealand region, although there is only one species represented, of the important New Zealand genera *Notornis* and *Ocydromus*, these, being birds of most limited flight form a very important link. Some stress might be laid on the occurrence of an *Aplonis* (*A. fuscus*), for it is only in the most northern part of Australia that the allied genus—*Calornis* is found, and that species (*C. metalica*) has evidently migrated from the Malayan region, so that the genus *Aplonis* can hardly be said to be Australian, the great stronghold of the genus being the Fiji, and New Hebrides Islands, but it is also found on the Fead Islands, (*Aplonis feadensis*), the Solomons and South East portion of New Guinea (*A. Cantoroides*) besides other islands in the Pacific.

The genus *Merula* is found throughout most of the islands of the Pacific, each group having one or more peculiar species or varieties, it extends from New Caledonia over the Fiji, Sandwich and New Hebrides Islands, and recently I have received information of a *Merula* inhabiting the Solomon Islands. It is somewhat remarkable that while the genus *Merula* is found so close to Australia as on Lord Howe's Island, no species of the genus has been recorded from the mainland, and from the close affinity

of its fauna to that of New South Wales one would certainly expect to find some trace of the genus left, but in all probability the islands are the remains of a sunken Continent which had never been connected with Australia.

It may be worthy of notice that 21 out of the 32 *genera* found on Lord Howe's Island have also representatives in New Zealand and there is not one genus peculiar to the Island; moreover it must be remembered that, Norfolk and Philipp Islands, not so far off, were inhabited by a genus of Parrot (*Nestor*) now strictly New Zealand.*

Of New South Wales species we find no less than 24 out of 34, and some of these are birds of weak flight, such as *Pachycephala rufiventis*, *P. gutturalis*, *Myiagra plumbea*. The occurrence of a *Strepera* there, a strictly Australian genus is important.

The genera *Gerygone* and *Pseudogerygone* are found in New Caledonia, New Zealand, and as far north as New Guinea, the great stronghold of the genus is New Guinea and Australia. *Rhipidura*, *Pachycephala* and *Zosterops* are found all through the S. S. Islands and New Guinea as well as Australia, the genera *Cuculus*, *Chalcites*, *Eurystomus*, *Halecyon*, *Ninox*, *Haliastur*, *Haliaetus*, *Hypotaenidia*, *Nycticorax*, *Ardeetta*, *Cinclus*, *Limosa*, *Anous*, *Phaeton*, and *Procellaria*, are found throughout the greater portion of the Southern, and some of them also in the Northern Hemisphere.†

Since the above was written, one of the employees of the Museum has returned from a visit to Lord Howe's Island made on behalf of the Trustees, bringing with him a most interesting collection on which I shall offer a few remarks in an early number of this journal.

* I am glad to say we have still in the Museum a specimen of the now extinct Philipp Island Parrot, *Nestor productus*.

† Reported only, as yet I have not any specimens of them.